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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,055	11/21/2001	Jason F. Hunzinger	09752-106001	1470
27572	7590	12/30/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303		KERVEROS, JAMES C		
		ART UNIT		PAPER NUMBER
		2133		

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/990,055	HUNZINGER, JASON F.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JAMES C KERVEROS	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 August 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This is a Final Office Action in response to Amendment filed August 5, 2004, in reply to the Office Action mailed April 15, 2004. Claims 1-31 are pending and presently under examination.
2. The Objections to the specification and claims, in the prior Office Action mailed April 15, 2004, are withdrawn in view of the amendment.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomcik et al. (US 6567388), filed: March 5, 1999.

4. Regarding independent Claim 1, Tomcik substantially discloses a method for retransmitting data frames in a communication system, as illustrated in Figures 1-6, comprising the steps of:

Requesting content, by transmitting data frame 70 from mobile unit 10 to BTS 12 over a communication link (wireless link between mobile unit 10 and a base station BTS 12), as shown in step 510.

Receiving the requested content (frame 70) by transmitting data frame 70 from (BTS 12) to mobile unit 10, as shown in step 610.

Sending a first acknowledgment, at step 630 by sending a predetermined number of NAKs, by mobile unit 10 to BTS 12, requesting that BTS 12 re-transmit frame 70 one time for each NAK transmitted by mobile unit 10, when the frame 70 is received in error by mobile unit 10, as indicated at step 620. Consequently, the mobile unit 10 sends ACK indicating successful receipt of re-transmitted frame 70 by mobile unit 10, as shown at step 660.

Regarding Claims 1, 2, 7-9, Tomcik does not explicitly disclose enabling utilization of the requested content in response to receiving a second acknowledgement.

However, Tomcik discloses a second acknowledgement sequence, such as steps (640, 650, and 660). At step 640, the multiple NAKs are received by BTS 12 to determine which frame was received in error. In step 650, BTS 12 re-transmits one time for each NAK received. In step 660, the mobile unit 10 receives the frames successfully.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the purpose of verifying that the frames are received successfully and being utilized by mobile unit 10. A person skilled in the art would have been motivated to modify Tomcik, since if any one of the re-transmitted frames is received successfully, any additional frames successfully received are ignored. The probability that one of the

re-transmitted frames will be successfully received increases dramatically by re-transmitting identical frames several times in close succession to each other.

Regarding Claim 3, Tomcik discloses wireless communication link between (BTS 12) and (mobile unit 10).

Regarding Claims 4 and 5, Tomcik discloses data frame (70, Figure 3) containing audio and text data information and outputting and displaying the information on a display indicator inherent to a (mobile unit 10), which is typically a wireless telephone, although wireless communication device 10 could also comprise a computer with a display equipped with a wireless modem or any other device capable of transmitting and receiving audio or data information to another wireless communication device.

Regarding Claim 6, Tomcik discloses data frame (70, Figure 3) containing text data information, which is a program and running such a program by displaying the information on a display indicator, which is inherent in a (mobile unit 10).

Regarding Claim 10, Tomcik does not explicitly disclose encrypted content, wherein receiving the second acknowledgment comprising a decryption key.

However, it is well known in the art to send encrypted content information over Internet secured webs with user ID and PIN codes, and then make the information available to the user through an acknowledgment command, after proper verification of the user ID and the PIN code. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use well-known user ID and PIN codes for retransmitting secured content over the communication network of Tomcik, prior to utilization of the information by the user.

5. Regarding independent Claim 11, Tomcik substantially discloses a method for retransmitting data frames in a communication system, as illustrated in Figures 1-6, comprising the steps of:

Receiving at (BTS 12) a request for content (frame 70) from a requesting device (mobile unit 10), as shown in step 510.

Sending the requested content (frame 70) from (BTS 12) to the requesting device (mobile unit 10), as shown in step 610.

Regarding independent Claims 11, 12, Tomcik does not explicitly disclose transmitting a utilization acknowledgment to the requesting device in response to receiving a delivery confirmation acknowledgment from the requesting device for enabling the requesting device to utilize the content, by enabling the requesting device to display the content.

However, Tomcik discloses a second acknowledgement sequence, such as steps (640, 650, and 660). At step 640, the multiple NAKs are received by BTS 12 to determine which frame was received in error. In step 650, BTS 12 re-transmits one time for each NAK received. In step 660, the mobile unit 10 receives the frames successfully. Furthermore, Tomcik discloses a (mobile unit 10) including a display indicator, which is inherent to a mobile unit for displaying information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the same obvious and motivational reasons, as applied to independent claim 1 above.

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Regarding Claims 13-17, Tomcik discloses receiving the request from (mobile unit 10) over a first communication wireless link (BTS 12) and forwarding the request over a second communication link, such as internet 20, wherein the second communication wired link (internet 20) is more reliable than the first communication link (BTS 12) which is a computer wired network interfacing with the MSC 16 coupled to a conventional public switch telephone network (PSTN) 18 or directly to a computer network, such as internet 20.

Regarding Claims 18, 19, Tomcik discloses retransmitting the requested content from (BTS 12) in response-to not receiving a delivery confirmation acknowledgment from the requesting device (mobile unit 10) within a timeout period, as show at steps 620 and 630. At step 620, the frame is received in error. At step 630, a predetermined number of NAKs, are sent by mobile unit 10 to BTS 12, requesting that BTS 12 re-transmit frame 70 one time for each NAK transmitted by mobile unit 10. Furthermore, Tomcik discloses in accordance with the teachings of IS-707, if the same frame is not successfully received within a predetermined amount of time after sending the initial NAK, a second request is sent to the transmitter.

6. Regarding independent Claim 20, Tomcik substantially disclose a system for retransmitting data frames in a communication system, as illustrated in Figures 1-6, comprising:

A content provider (not shown) connected to a first network (Internet 20) for transmitting content requested by a user station (mobile unit 10) connected to a second

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network [wireless communication link between (BTS 12) and (mobile unit 10)], as shown in Figure 1.

A gateway device including a mobile switching center (MSC) 16, controller (BSC) 14, and a (BTS 12), which is connected to the first network Internet 20 and to the second network (BTS 12).

The (BTS 12) transmits the requested content (frames) to the mobile unit (10) and also transmits an "acknowledgment" operative in response to an acknowledgment from the mobile unit (10) that there is no error, so as to enable the mobile unit (10) to utilize the free error content. When a frame, which is transmitted from the (BTS 12), is received in error by the (mobile unit 10), a number of negative-acknowledgement messages (NAKs) are sent from the (mobile unit 10) to the (BTS 12), see Col. 6, lines 18-40). Conversely, if the (mobile unit 10) receives frames free of error, then an acknowledgement message, or ACK, is transmitted to the transmitter (BTS 12) informing the transmitter of a good frame. Network Internet 20 may include a billing system for billing a user (mobile unit 10) in response to a display acknowledgment message.

Regarding independent Claim 20, 21, 22, Tomcik does not explicitly disclose transmitting a utilization acknowledgment operative to enable the user station to utilize the requested content in response to receiving a delivery confirmation acknowledgment from the user station.

However, Tomcik discloses a second acknowledgement sequence, such as steps (640, 650, and 660). At step 640, the multiple NAKs are received by BTS 12 to

determine which frame was received in error. In step 650, BTS 12 re-transmits one time for each NAK received. In step 660, the mobile unit 10 receives the frames successfully. Furthermore, Tomcik discloses a (mobile unit 10) including a display indicator, which is inherent to a mobile unit for displaying information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the same obvious and motivational reasons, as applied to independent claim 1 above.

Regarding Claim 23-26, Tomcik discloses a first network internet 20, which is a computer wired network interfacing with the MSC 16 coupled to a conventional public switch telephone network (PSTN) 18 or directly to a computer network, such as internet 20, so that the first network is more reliable than the second network, which is wireless communication (BTS 12). The user station comprises a mobile device such as (mobile unit 10).

Regarding Claim 27, Tomcik discloses retransmitting the requested content from (BTS 12) in response-to not receiving a delivery confirmation acknowledgment from the requesting device (mobile unit 10) within a timeout period, as show at steps 620 and 630. At step 620, the frame is received in error. At step 630, a predetermined number of NAKs, are sent by mobile unit 10 to BTS 12, requesting that BTS 12 re-transmit frame 70 one time for each NAK transmitted by mobile unit 10. Furthermore, Tomcik discloses in accordance with the teachings of IS-707, if the same frame is not

successfully received within a predetermined amount of time after sending the initial NAK, a second request is sent to the transmitter.

7. Regarding independent Claim 28, Tomcik substantially discloses an article comprising a machine-readable medium including machine-executable instructions, for retransmitting data frames in a communication system, as illustrated in Figures 1-6, including the same method steps as applied to independent claim, above.

Regarding Claims 28 and 29, Tomcik does not explicitly disclose enabling utilization of the requested content in response to receiving a second acknowledgement. However, Tomcik discloses a second acknowledgement sequence, such as steps (640, 650, and 660). At step 640, the multiple NAKs are received by BTS 12 to determine which frame was received in error. In step 650, BTS 12 re-transmits one time for each NAK received. In step 660, the mobile unit 10 receives the frames successfully.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the same obvious and motivational reasons, as applied to independent claim 1 above.

8. Regarding independent Claim 30, Tomcik substantially discloses an article comprising a machine-readable medium including machine-executable instructions, for retransmitting data frames in a communication system, as illustrated in Figures 1-6, including the same method steps as applied to independent claim 11, above.

Regarding independent Claims 30, 31, Tomcik does not explicitly disclose transmitting a utilization acknowledgment to the requesting device in response to receiving a delivery confirmation acknowledgement from the requesting device for enabling the requesting device to utilize the content. However, Tomcik discloses a second acknowledgement sequence, such as steps (640, 650, and 660). At step 640, the multiple NAKs are received by BTS 12 to determine which frame was received in error. In step 650, BTS 12 re-transmits one time for each NAK received. In step 660, the mobile unit 10 receives the frames successfully.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the same obvious and motivational reasons, as applied to independent claim 1 above.

### ***Response to Arguments***

9. Applicant's arguments filed August 5, 2004 have been fully considered but they are not persuasive. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomcik et al. (US 6567388), as set forth in the present Office Action.

10. The Applicant argues that the applied reference by Tomcik does not disclose, teach or suggest the sending of a delivery confirmation acknowledgement of successful receipt of the entire requested content. Applicant further argues, the sender in Tomcik, et al. never knows if the frame has been successfully received since after trying three

times to send and receive the frame, the frame is simply ignored by the receiver for use in constructing the original data (column 6, lines 45-50, Tomcik).

In response to Applicant's argument, the Examiner concedes that Tomcik does not disclose a delivery confirmation acknowledgement of successful receipt of the entire requested content, as amendment in the independent claims 1, 11, 20, 28 and 30. However, as indicated in the new grounds of claims rejection under 35 U.S.C. 103(a) as being unpatentable over Tomcik, above, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the method steps (640, 650, and 660), as taught by Tomcik, for the purpose of verifying that the frames are received successfully and being utilized by mobile unit 10. Further, a person skilled in the art would have been motivated to use Tomcik method, since if any one of the re-transmitted frames is received successfully, any additional frames successfully received are ignored. The probability that one of the re-transmitted frames will be successfully received increases dramatically by re-transmitting identical frames several times in close succession to each other.

In response to Applicant's argument that the sender in Tomcik never knows if the frame has been successfully received, clearly the sender (BTS 12) knows that the frame has been successfully received by the mobile unit 10, by sending a predetermined number of NAKs, by mobile unit 10 to BTS 12, at step 630, when the frame 70 is received in error by mobile unit 10, as indicated at step 620, requesting that BTS 12 re-transmit frame 70 one time for each NAK transmitted by mobile unit 10. Consequently, the absence of NAKs, transmitted by the mobile unit 10, is a clear indication that the

frame has been successfully transmitted by the sender (BTS 12). Therefore, there is no need for the sender to transmit additional ACK to the mobile unit 10 indicating the frame has been successfully transmitted, so as to utilize the data.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

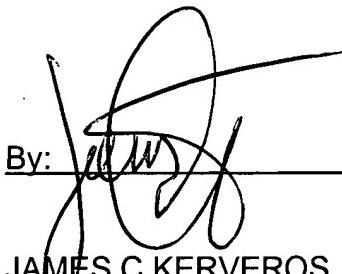
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

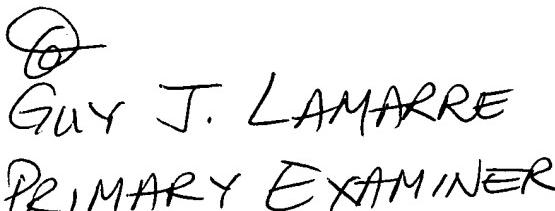
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decay can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Date: 13 December 2004  
Office Action: Final Rejection

By:   
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Examiner  
Art Unit 2133

  
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